

Applic. No. 09/718,896

Amdt. dated April 15, 2004

Reply to Office action of January 15, 2004

Remarks/Arguments:

Reconsideration of the application is requested.

Claims 1-7 remain in the application

In item 2 on page 2 of the Office action, claims 1, 5, 6, and 7 have been rejected as being obvious over Choi et al. (U.S. Patent No. 4,077,847) (hereinafter "Choi") in view of Tratz et al. (U.S. Patent No. 4,878,440) (hereinafter "Tratz") and Nollet (U.S. Patent No. 4,178,232) under 35 U.S.C. § 103.

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, *inter alia*:

the air separator drum having a longitudinal axis, an inner wall, and drivers disposed on the inner wall.

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The Choi reference discloses a solid waste disposal system including a zigzag shaped classifier (146) operated by air. The overall system disclosed in Choi includes shredding waste, separating it into different fractions, and finally burning combustible fractions.

The Choi reference teaches away from the present invention because Choi teaches a thermal waste process after solid waste has been separated by the zigzag classifier (146).

It is noted that the corporate assignee of Tratz is also the assignee of the instant application. Therefore, applicants are very familiar with the reference.

The Tratz reference discloses a residue sorting device (22), which may be constructed in the form of a sieve disposed downstream of a pyrolysis drum (2).

The sieve disclosed in Tratz serves the purpose of separating fractions contained in waste that has been pyrolyzed. Therefore, a person of ordinary skill in the art would not consider disposing the sieve disclosed in Tratz immediately after the shredder in the system disclosed by Choi.

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Moreover, the Nollet reference discloses an apparatus for separating solid materials, where the system has an air drum (14). The air drum (14) is constructed for handling solid waste and not pyrolyzed waste. Accordingly, both the zigzag-shaped classifier of Choi and the air drum of Nollet are used for handling solid waste and not pyrolysed waste. Therefore, disposing the air drum (14) of Nollet downstream of the lower outlet of the zigzag-shaped classifier in Choi does not obviate the invention of the instant application.

Furthermore, It is a requirement for a *prima facie* case of obviousness, that the prior art references must teach or suggest all the claim limitations.

The references do not show or suggest the air separator drum having a longitudinal axis, an inner wall, and drivers disposed on the inner wall, as recited in claim 1 of the instant application.

The references applied by the Examiner do not teach or suggest all the claim limitations. Therefore, it is believed that the Examiner has not produced a *prima facie* case of obviousness.

In summary, Choi discloses pyrolysing waste after separation. Choi does not disclose a zigzag classifier, which is

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constructed for handling waste coming out of the thermal waste process.

Therefore, a person of ordinary skill in the art would not dispose the sieve disclosed in Tratz and the air drum disclosed in Nollet in a system as disclosed in Choi. Therefore, the present invention as claimed is not obvious over Choi in view of Tratz and Nollet.

Therefore, the present invention is not just an arbitrary arrangement of features, but instead, it is a careful selection of components and a careful selection of their respective locations which is not shown or suggested by the prior art and which provides substantial advantages thereover.

A critical step in analyzing the patentability of claims pursuant to 35 U.S.C. § 103 is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. See In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614,1617 (Fed. Cir. 1999). Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the

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invention taught is used against its teacher." Id. (quoting W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983)).

Most if not all inventions arise from a combination of old elements. See In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453,1457 (Fed. Cir. 1998). Thus, every element of a claimed invention may often be found in the prior art. See id. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. See id. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the appellant. See In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 163.5, 1637 (Fed. Cir. 1998); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125,1127 (Fed. Cir. 1984).

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. See Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole,

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rather than expressly stated in the references. See WMS Gaming, Inc. v. International Game Tech., 184 F.3d 1339, 1355, 51 USPQ2d 1385, 1397 (Fed. Cir. 1999). The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981) (and cases cited therein). Whether the examiner relies on an express or an implicit showing, the examiner must provide particular findings related thereto. See Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617. Broad conclusory statements standing alone are not "evidence." Id. When an examiner relies on general knowledge to negate patentability, that knowledge must be articulated and placed on the record. See In re Lee, 277 F.3d 1338, 1342-45, 61 USPQ2d 1430, 1433-35 (Fed. Cir. 2002).

Upon evaluation of the examiner's comments, it is respectfully believed that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims. Accordingly, the examiner is requested to withdraw the rejection.

In item 3 on page 4 of the Office action, claims 2-4 have been rejected as being obvious over Choi (U.S. Patent No.

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4,077,847) in view of Tratz (U.S. Patent No. 4,878,440) and Robinette Jr. et al. (U.S. Patent No. 5,321,898) under 35 U.S.C. § 103. Robinette Jr. et al. do not make up for the deficiencies of Choi, Tratz, and Nollet. Since claim 1 is believed to be allowable, dependent claims 2-4 are believed to be allowable as well.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-7 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel respectfully requests a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made.

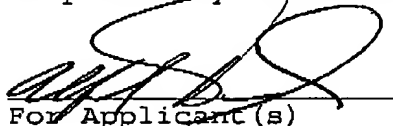
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Please charge any other fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner & Greenberg P.A., No. 12-1099.

Respectfully submitted,

  
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